Lesson 14: Menstruation, Conception, Pregnancy, & Birth

OBJECTIVES

1. Students will be able to describe how pregnancy occurs and list the stages of pregnancy and childbirth.

2. Students will learn about all pregnancy options and resources for these options, including California’s Safe Surrendered Baby Law.

3. Students will be able to list five actions people can take to take care of their reproductive health and, if pregnancy occurs or is desired, increase the chances of having a healthy pregnancy.

AGENDA

5 minutes  Do Now
35 minutes Menstruation, Pregnancy, & Childbirth: PowerPoint Presentation & Optional Video
10 minutes What Can Mai and Kai Do?
Homework  Talk to a Parent or Trusted Adult

MATERIALS

• Vocabulary Reference List
• Menstruation, Pregnancy, & Childbirth: PowerPoint Presentation
• Menstruation, Pregnancy, & Childbirth: PowerPoint Slide Notes

• Worksheet: What can Main & Kai Do?
• Handout: Pregnancy Options
• Homework: Talk to a Parent or Trusted Adult

CALIFORNIA HEALTH EDUCATION STANDARDS

1.2.G Explain how conception occurs, the stages of pregnancy, and the responsibilities of parenting
1.5.G Summarize fertilization, fetal development, and childbirth.
1.6.G Explain responsible parenting and prenatal care and parenting, including California’s Safely Surrendered Baby Law.
7.1.G Describe personal actions that can protect sexual and reproductive health (including one’s ability to deliver a healthy baby in adulthood).
Lesson 14: Menstruation, Conception, Pregnancy, & Birth

DO NOW 5 minutes

Materials

• Every student needs a notebook, journal, or paper and a pen
• PowerPoint slides #1 – 3

Activity
Show slide #2, with images of different types of families. Remind students that there are lots of types of families, and ask them to start thinking about what kind of family they might want to have someday. Then turn to the Do Now questions on slide #3, and ask students to write their responses to these questions:

What type of family would you like to have?
Would you like to be: Single? Partnered? Married? In a committed relationship?
Would you to have children or not? If yes, how many? At what age?

Ask a couple of volunteers to share their answer to the “Do Now” questions. Reiterate that there are many different types of families and that some have children and others don’t. People of all genders and sexual orientations can start a pregnancy and possibly become parents.

Suggested Script:
Oftentimes people think that pregnancy just “happens.” But modern birth control methods allow people to prevent or plan pregnancy. Today’s lesson is on pregnancy, what people can do to increase the chances of having a healthy pregnancy, and options available to someone who becomes pregnant.

Menstruation, Conception, Pregnancy, & Birth: PowerPoint Presentation 35 minutes

Materials

• PowerPoint slides #4 – 34(end)
• PowerPoint slide notes
• Handout: Pregnancy Options
• Handout: Preconception Health

Activity
Use the PowerPoint slides to cover the material in this section. The PowerPoint slides contain notes to assist you in presenting this material. Please refer to the notes in the slides for more information about the topics presented. The slides cover various topics. Here is the breakdown for topics, slide numbers, and approximately how long to spend on each topic.
**Lesson 14: Menstruation, Conception, Pregnancy, & Birth**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Slides</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menstruation &amp; Conception</td>
<td>4 - 12</td>
<td>10 min.</td>
</tr>
<tr>
<td>Pregnancy Options</td>
<td>13 - 15</td>
<td>5 min.</td>
</tr>
<tr>
<td>Pregnancy &amp; Childbirth</td>
<td>16 - 25</td>
<td>10 min.</td>
</tr>
<tr>
<td>Impacts on Health</td>
<td>26 - 34</td>
<td>10 min.</td>
</tr>
</tbody>
</table>

**Menstruation & Conception**

Explain to students that you will now be discussing the menstrual cycle and how a pregnancy begins.

**Suggested Script:**

In order to understand how and when pregnancy is possible, we need to first understand menstruation and the menstrual cycle. Understanding menstruation helps us understand how pregnancy can occur. Now we know that about 2 weeks before the period begins, or halfway through someone’s cycle is when ovulation tends to occur. If a cycle lasts 28 days, the time when someone will be most fertile (likely to get pregnant) is between days 11-16 of the cycle. It will be 7 days sooner in someone with a 21-day cycle, 7 days later in someone with a 35-day cycle. Keep in mind that teens tend to have irregular cycles – for example for a teen they might have 21 days between periods, then 28 days, and then 20 days. It is very common for teens to have irregular cycles; as teens get older their cycles tend to become more regular.

**Pregnancy Options**

Explain to students that you will now be reviewing the four options that a female has when becoming pregnant.

Pass out the Pregnancy Options handout.

**Suggested Script:**

In California, if a female becomes pregnant there are options available. We will learn about these options in this next section. Some people may have strong beliefs and ideas about these options. We are not here to discuss what is “right” or “wrong” – We are here to discuss the options that a person can legally access in CA if they become pregnant. If you would like to discuss your values and beliefs around these options, we can identify some places and people for you to talk to.

**Pregnancy & Childbirth**

Explain to students that you will now be reviewing information about how a pregnancy develops and how a baby is born. Detailed information about stages of pregnancy and suggested scripts are included in the “notes” section under the slides.
Lesson 14: Menstruation, Conception, Pregnancy, & Birth

**Teacher Tip:**
If time allows, cue up and show the 3rd chapter of PBS’s 8-part film: Life’s Greatest Miracle. This chapter shows the sperm’s journey to the egg. It is available online at: http://www.pbs.org/wgbh/nova/miracle/program_adv.html

If you’d like to go into more depth on this topic, or would like to show students video of pregnancy and birth, the DVDs “The Miracle of Life” and “From Conception to Birth” have been approved for use in SFUSD high schools, and are available for check out from School Health Programs. Call 415-242-2615 for more information.

**Impacts on Health**
Review with students how life choices can impact our health. Ask students for answers to the questions on slides #31-33 before revealing the answers on the slides.

Pass out the Preconception Health handout.

After completing all of the slides, explain that peer educators from the Teenage Pregnancy and Parenting Program will be coming to class and they will share their experiences with being a teen parent. They will share more about preconception health, pregnancy, prenatal care, childbirth, and parenting.

**WHAT CAN MAI & KAI DO?**

**10 minutes**

**Materials**
- Worksheet: What Can Mai & Kai Do?
- Handout: Pregnancy Options

**Activity**
Have students partner up or work in small groups and use the Pregnancy Options handout to complete the What Can Mai & Kai Do? worksheet. If students do not complete the worksheet in class, have them complete it for homework.

**HOMEWORK**

**Talk with a Parent, Caregiver, or Trusted Adult**
Lesson 14: Vocabulary

1. **Abortion**: Ending or terminating a pregnancy. This can happen spontaneously (usually called a miscarriage) or through a medical or surgical procedure.

2. **Adoption**: When someone carries a pregnancy to term and another person or people become parents to the child.

3. **Embryo**: A term used to describe a growing pregnancy during its first two months.

4. **Fetus**: A term used to describe a growing pregnancy from the third month until birth.

5. **Fertilization**: When an egg and sperm meet.

6. **Implantation**: When a fertilized egg attaches to the lining of the uterus (endometrium). This is usually considered the moment of conception (when a pregnancy starts).

7. **Menstrual Cycle**: The cycle of physical and hormonal changes in the uterus and ovaries that prepares the female body for pregnancy. The cycle begins on the first day of a person’s period and usually lasts for 21-35 days, until the first day of their next period.

8. **Ovulation**: When an egg is released from the ovary. This happens about halfway through the menstrual cycle.

9. **Pregnancy Options**: The choices available to a female when she becomes pregnant. These include parenting, adoption, abortion, and, in emergencies, safe surrender.

10. **Prenatal care**: The medical care a person could receive during pregnancy to regularly check-up on the health and the health of the growing pregnancy.

11. **Safe Surrender Law**: A law in California that allows an individual to safely surrender an infant within 72 hours of birth to a designated site (such as a hospital or police station) without fear of arrest or prosecution.
Many teens wait to talk to someone or access health services when they think they might be pregnant. However, it is important to get a pregnancy test as soon as possible. A person will have more options the earlier they find out that they are pregnant. In California, youth (including youth who are undocumented) can receive free or low-cost, confidential pregnancy tests, prenatal care, and abortion services.

<table>
<thead>
<tr>
<th>Option</th>
<th>Basic Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Have an abortion</strong></td>
<td><strong>Abortion Facts</strong></td>
</tr>
<tr>
<td></td>
<td>• Abortion is safer than giving birth and will not harm someone’s ability to have children in the future.</td>
</tr>
<tr>
<td></td>
<td>• In the U.S., abortion is legal up to 24 weeks into a pregnancy (calculated from the last menstrual period). In California, it is legal later if the pregnancy threatens the life or health of the mother.</td>
</tr>
<tr>
<td></td>
<td>• The earlier someone has an abortion, the safer it is and the more choices they have.</td>
</tr>
<tr>
<td></td>
<td>• In the U.S., about 1/3 of all females have an abortion by age 45</td>
</tr>
<tr>
<td></td>
<td><strong>What types of abortion are available?</strong></td>
</tr>
<tr>
<td></td>
<td>• MEDICATION ABORTION: Also called the “Abortion Pill,” it’s available up to 9 weeks. Usually involves 1-2 visits and a follow-up exam. May take several days and involves bleeding and cramping.</td>
</tr>
<tr>
<td></td>
<td>• IN-CLINIC ABORTION: There are a few types of in-clinic abortion. It is available up to 24 weeks into a pregnancy. Usually involves one visit to a health care provider and a follow up exam</td>
</tr>
<tr>
<td><strong>Continue pregnancy &amp; become a parent</strong></td>
<td><strong>Important Points – If Someone Decides to Continue the Pregnancy</strong></td>
</tr>
<tr>
<td></td>
<td>• The earlier someone receives prenatal care, the better their chances of having a safe birth and a healthy baby.</td>
</tr>
<tr>
<td></td>
<td>• A pregnant teen has the right to stay in school</td>
</tr>
<tr>
<td></td>
<td>• California provides a range of services to pregnant and parenting teens.</td>
</tr>
<tr>
<td></td>
<td>• Information is available at <a href="http://www.pregnantyouth.info">http://www.pregnantyouth.info</a></td>
</tr>
<tr>
<td></td>
<td>• Under California’s Safely Surrendered Baby Law (CA Health and Safety Code, section 1255.7) a parent can safely surrender a baby to a hospital ER or other designated site within 72 hours of birth. The parent(s) won’t be prosecuted or asked any questions.</td>
</tr>
<tr>
<td><strong>Continue pregnancy &amp; make an adoption plan</strong></td>
<td><strong>Important Points – If Someone Selects Adoption</strong></td>
</tr>
<tr>
<td></td>
<td>• Adoption can take place independently or through an agency and the biological mother has the right to select the adoptive parents.</td>
</tr>
<tr>
<td></td>
<td>• In a closed adoption, the biological mother cannot have a relationship with the baby after adoption; in an open adoption, she can.</td>
</tr>
<tr>
<td></td>
<td>• The biological father has the right to “claim” and raise the baby.</td>
</tr>
<tr>
<td></td>
<td>• The biological parents have 90 days to change their minds about adoption.</td>
</tr>
</tbody>
</table>

*Source: California Pregnant and Parenting Youth Guide*
**Handout: Preconception Health**

**PRE=BEFORE, CONCEPTION=PREGNANCY**

Even before pregnancy, a person’s health can affect the health of their ova (eggs) or sperm. It can also affect the health of a developing embryo/fetus, even before a female knows that she is pregnant. That is why preconception health is important for anyone having sex that can result in pregnancy. Protect your future!

**TO DO TODAY:**

- **Take a daily multi-vitamin** with 400-800 mcg of folic acid. Folic acid is a B-vitamin that helps prevent serious birth defects of the brain and spine and may help males have healthier sperm. It also gives you better hair, skin and nails. See [www.gofolic.org](http://www.gofolic.org) for more information.

- **Exercise regularly.** Aim for at least 30 min. per day or 150 min. per week of activities like riding a bike or dancing.

- **Eat well-balanced and nutritious meals** that include lots of fruits and vegetables, whole grains, protein and healthy fats like avocados and olive oil.

- **Avoid drugs, alcohol, and smoking.** These can affect someone’s overall health, including sperm quality and the health of a pregnancy.

- **Test for STIs, if sexually active.** (STIs like Chlamydia, Gonorrhea and HIV). If left untreated, some STIs can make it hard to have children later on (infertility). Also, it’s important to get tested and treated for STIs before getting pregnant, since these can harm a fetus or be passed to a child during birth.

- **See a healthcare provider.** All of the following can affect the health of a fetus and/or biological mom. Some can also affect sperm health or cause early birth:
  - Make sure vaccines are up-to-date and consider getting a flu shot.
  - Get medical conditions under control (asthma, diabetes, depression, high blood pressure, thyroid disease, & epilepsy).
  - Check to see if any medicines, over-the-counter drugs, or herbal and dietary supplements could be harmful to a growing pregnancy.
  - Consider genetic counseling if they or a close relative has an inherited disease.

**BEFORE STARTING A PREGNANCY:**

- **Avoid toxic substances & dangerous chemicals** at home and, if possible, at work. They can harm eggs and sperm. Also, a growing fetus is more likely to be hurt by such chemicals than a teen or adult.

- **Create supportive relationships and limit stress,** as stress can make it harder to start a pregnancy. Relationships and stress can also affect (positively or negatively) the health of a fetus and pregnant female.

- **Limit caffeine** before and during pregnancy to support becoming pregnant and maintaining a healthy pregnancy.
Worksheet: What Can Mai & Kai Do?

Name:____________________________ Period:_______ Date:____________________

**Directions:** Read the situation below, and then complete the questions on the work sheet.

**The Situation:** Mai is 24. She has an AA degree and works as a dental office assistant. She is in her last semester of nursing school. Kai is 23, and works as a journeyman welder. In one more year, he will be able to get his license. Mai and Kai have been together since high school. They are planning to get married and start a family in one year, after Mai finds a job as a nurse and Kai gets his welding license.

Kai gets a lot of exercise on his job, and he also bikes to relieve stress. Mai works out at the gym 3 days per week and meditates every morning to relieve stress. While they both like McDonalds and KFC, they also eat a lot of fruit and vegetables. They go out drinking and clubbing with their friends every Friday. Mai regularly takes over-the-counter medicines for her allergies. Her mother has high blood pressure and diabetes. Kai has a brother with Downs Syndrome.

**Questions:**
1. What are Mai and Kai doing right now that can help them have a healthy pregnancy in the future?

2. What are some habits they might want to change before trying to start a pregnancy?

3. What might they want to talk to a health care provider about before trying to start a pregnancy?

4. What are some reasons Mai may want to get prenatal care as soon as possible if she becomes pregnant?

5. List 3 new responsibilities Mai and Kai will have if they become parents.
What can Mai & Kai Do? (Part 2)

Directions: Now imagine that Mai and Kai are still in high school. They’ve been having penis-vagina sex regularly, using condoms for birth control and STI protection. About 6 weeks ago, they had a condom break. Now Mai is late for her period.

Questions:
1. Why might Mai want to get a pregnancy test as soon as possible?

2. What are Mai’s options if she is pregnant?

3. What are Kai’s rights and responsibilities if Mai is pregnant?

4. Who could Mai and Kai turn to for support in this situation?

5. What are their options if they are pregnant? List at least one reason for each option for why they might choose that option.

6. What can Mai and Kai do if they are not pregnant?

7. Under the “California Safe Surrender Baby Law” where could Mai surrender her baby?
Lesson 14: Menstruation, Conception, Pregnancy, & Birth

Homework: Talk with a Parent, Caregiver, or Trusted Adult

Name: _________________________________________________________________
Period: ___________________ Date: ______________________________

Purpose: This is a chance to ask your parent, caregiver, or a trusted adult about their (and your family’s and your religion’s) beliefs and values about pregnancy and sexuality. It will also give you a chance to get to know one another a little better.

Directions: Find a quiet place where the two of you can talk privately. Set aside 10 minutes. During this time, please give full attention to one another ... no texting, watching TV, and so on. Ask each other the questions below and write down what each person says. Ask one another the following questions, with the understanding that:
- You are each welcome to say, “That one is too private. Let’s skip it.”
- What you discuss will not be shared with anyone else, even within the family, unless you give one another permission to share it.
- It’s OK to feel silly or awkward but it’s important to try the homework anyway.
- We recommend that you take turns asking questions. When it is your turn to listen, really try to understand the other person’s response.
- It’s OK to disagree.

Questions:

1. What are your thoughts on a pregnant teen choosing abortion? Adoption? Parenting?

   Student:

   Adult:

2. What circumstances or factors would you encourage a teen to think about when making a decision about pregnancy and pregnancy options?

   Student:

   Adult:
3. What do you think are some qualities of a responsible parent?

Student:

Adult:

4. What could help somebody become a responsible parent?

Student:

Adult:

My student and I discussed this topic on ________________ (date):

Adult name: ________________  Adult signature: ________________
Lesson 14: Menstruation, Conception, Pregnancy, & Birth

Menstruation. Pregnancy, & Birth: Slide Notes

Slide 1: Suggested Script:
Oftentimes people think that pregnancy just “happens.” But modern birth control methods allow people to prevent or plan pregnancy. Today’s lesson is on pregnancy, what people can do to increase the chances of having a healthy pregnancy, and options available to someone who becomes pregnant.

Slide 2: Show slide #2, with images of different types of families. Remind students that there are lots of types of families, and ask them to start thinking about what kind of family they might want to have someday. Then turn to the Do Now questions on slide #3, and ask students to write their responses to the questions.

Slide 3: Have students complete the do now question.

Slide 4: Suggested Script:
In order to understand how and when pregnancy is possible, we need to first understand menstruation and the menstrual cycle. Understanding menstruation helps us understand how pregnancy can occur. Now we know that about 2 weeks before the period begins, or halfway through someone’s cycle is when ovulation tends to occur. If a cycle lasts 28 days, the time when someone will be most fertile (likely to get pregnant) is between days 11-16 of the cycle. It will be 7 days sooner in someone with a 21-day cycle, 7 days later in someone with a 35-day cycle. Periods may be irregular for 12-18 months after menarche (first period) – for example for a teen they might have 21 days between periods, then 28 days, and then 20 days. It is very common for teens to have
**Lesson 14: Menstruation, Conception, Pregnancy, & Birth**

<table>
<thead>
<tr>
<th>Slide 5:</th>
<th>Menstruation is when the lining of the uterus sheds and comes out of the body through the vagina. Some people call this “a period.” Someone will usually get their period once a month at roughly the same time every month, but it may take 12-18 months after the first period before it becomes regular. It is common and normal for teens to have irregular periods.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is Menstruation?</strong></td>
<td>• The shedding of the uterine lining through the vagina, commonly called “a period” • Periods may be irregular for 12-18 months after menarche (first period)</td>
</tr>
</tbody>
</table>

| Slide 6: | About 1-6 tablespoons of blood comes out over the 4-7 days that a person has a period. However, this blood is thicker and darker because it contains skin cells and tissue. There may be clumps of skin cells in the blood. This is normal. People can use different types of products to catch their menstrual blood. These include pads, tampons, and menstrual cups. It is recommended to avoid scented products because they can cause irritation. Someone could talk with a parent/guardian or trusted adult to figure out what products to use. About half of all females get period cramps. Using a heating pad or hot water bottle on the abdomen can help to relieve discomfort. Staying hydrated, doing mild exercise, eating healthy foods, and stretching can also help with cramps. If menstrual cramps are severe someone can take over the counter pain medication or talk to a healthcare provider. |
| **Facts about Menstruation** | • Typical blood loss is 1 – 6 tablespoons • People can use pads, tampons, or menstrual cups to catch the blood • About 50% of females have cramps. There are many ways to relieve cramps, including staying hydrated, stretching, using a heating pad, doing minor exercise, and taking pain medication. |

irregular cycles; as teens get older their cycles tend to become more regular.
Menstruation happens on a monthly cycle, anywhere between 20-45 days- average is 28 days. This is called the female sexual cycle. The menstrual cycle is how the ovaries and other sexual organs prepares each month in case a pregnancy starts. The cycle is controlled by the hormones estrogen and progesterone.

If time allows, review the menstrual cycle using this MSNBCMedia animation: [http://msnbcmedia.msn.com/i/msnbc/Components/Interactives/Health/WomensHealth/zFlashAssets/menstrual_cycle_dw2%5B1%5D.swf]

The menstrual cycle begins on the first day of menstruation/period. During someone’s period, the lining of the uterus (endometrium), which consists of blood and tissue, “sheds.” A period can last 4-7 days.

After menstruation/the period is over, the body prepares to become pregnant:
- The ovary will release a mature egg.
- The endometrium (lining of the uterus) begins to grow again.

If the egg is not fertilized:
- The egg leaves the Fallopian tube and disintegrates (breaks down).
- About two weeks after the body releases an egg, the endometrium will start to shed again, beginning the cycle all over again.

The whole menstrual cycle takes about a month, but it can range from 21-35 days.

NOTE: Slide is animated. Click on the question to make the answer appear!
People can use a chart, mark a calendar, or use a phone application like iPeriod or p tracker to keep track of the menstrual cycle. These apps are useful for tracking periods and for being in touch with one’s body. They can also be used by someone who is trying to start a pregnancy. However, they are not accurate enough to track ovulation as a way to avoid pregnancy (as a birth control method).

When fertilization occurs – usually 14 days/2 weeks before the next period would begin.
Where fertilization occurs – in the Fallopian tube.
Over half of all fertilized eggs don’t survive to become a pregnancy.
If it lives, within 12 hours, the egg begins to divide – 2 cells become 4, 4 become 8, etc. as the egg travels down the tube.

By day 4 or 5 it reaches the uterus and “plants” itself in the endometrium (lining of the uterus). This is called implantation. This is what most health care providers consider conception, or the beginning of pregnancy.

To help students better understand this process, consider showing the Nova video here:
http://www.pbs.org/wgbh/nova/miracle/program_adv.html

Suggested Script:
“In California, if a female becomes pregnant there are options available. We will learn about these options in this next section. Some people may have strong beliefs and ideas about these options. We are not here to discuss what is “right” or “wrong” – We are here to discuss the options that a person can legally access in CA if they become pregnant. If you would like to discuss your values and beliefs around these options, we can identify some places and people for you to talk to.”
**Slide 14:**

**Pregnancy Options**
- Carry pregnancy to term & become a parent
- Carry pregnancy to term & make an adoption plan
- Abortion
  - Minors can have an abortion without parent/guardian permission
  - In CA, legal up to 24 weeks & after 24 weeks to save life or health of mother

**Carry pregnancy to term & become a parent:** Teens who choose parenting have the right to stay in school and California provides services to support them in their pregnancy and parenting.

**Carry pregnancy to term & make an adoption plan:** There are a few different types of adoption and ways to plan an adoption. There are many resources and agencies to support somebody with this decision.

NOTE: When someone chooses to carry a pregnancy to term they can access prenatal care to ensure a healthier pregnancy and childbirth. There will be more information about this in the next section.

**Abortion**
Abortion is choosing to end a pregnancy. Under California law, minors can access abortion services confidentially, meaning without their parent/guardian’s permission.

In California, abortion is legal up to 24 weeks into the pregnancy for any reason. After 24 weeks, abortion is still possible if the life or health of the mother is threatened by pregnancy.

There are two main types of abortion.
Medication abortion is available up to 9 weeks into the pregnancy. This involves taking a medicine. The medicine is taken outside of a health center, usually in someone’s home or in a safe place. A follow-up visit is needed to make sure that the abortion is complete.

In-clinic abortion is available up to 24 weeks into the pregnancy. It can be done in a variety of ways. This type of procedure is performed in a health center, hospital, or a doctor’s office.

**Slide 15:**

**CA Safe Surrender Baby Law**
- Parent can legally surrender a baby within 72 hours of birth
- Baby must be dropped off at a “Safe Surrender” Site:
  - Hospital
  - Fire department
  - Police station

**California’s Safe Surrender Baby Law**
A parent can safely surrender a baby to a designated Safe Surrender site (hospital, fire department, police station) within 72 hours of its birth. “Safe” means that the parent will not get in legal trouble for doing so. This also means that a baby, that might not have been cared for if it stayed with it’s parent, is now safe. This is intended for emergency situations.
Lesson 14: Menstruation, Conception, Pregnancy, & Birth

Slide 16:
Explain to students that you will now be reviewing information about how a pregnancy develops and how a baby is born.

Teacher Tip:
If time allows, cue up and show the 3rd chapter of PBS's 8-part film: Life's Greatest Miracle. This chapter shows the sperm's journey to the egg. It is available online at: http://www.pbs.org/wgbh/nova/miracle/program_adv.html

If you’d like to go into more depth on this topic, or would like to show students video of pregnancy and birth, the DVDs “The Miracle of Life” and “From Conception to Birth” have been approved for use in SFUSD high schools, and are available for check out from School Health Programs. Call 415-242-2615 for more information.

Slide 17:
Brainstorm early pregnancy symptoms. Ask the class what they think are some symptoms or signs that a person is pregnant. Correct any misinformation. Click to reveal the answers.

Suggested Script
Not all females experience the same symptoms to the same degree. In fact, some females experience no symptoms at all early on in a pregnancy. Someone who has had unprotected penis-vagina sex and notices any of these symptoms may want to get a pregnancy test. Pregnancy tests are FREE at teen clinics and can be done as early as 2 weeks after unprotected sex to see if a pregnancy has started.

Slide 18:
STAGES OF PREGNANCY

- EMBRYO - first 2 months
- FETUS - from month 3 through birth
- BABY - medically, only after birth
Slide 19:

<table>
<thead>
<tr>
<th>STAGES OF PREGNANCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy is divided into three 3-month periods called “trimesters.”</td>
</tr>
<tr>
<td>1st Trimester</td>
</tr>
</tbody>
</table>

Slide 20:

During months 1 & 2
At this point, many females don’t know that they are pregnant yet. Yet, this is an important time for organ and brain development. An embryo can experience negative consequences from the pregnant female using tobacco, drugs or alcohol, becoming infected with an STI, or engaging in unhealthy behaviors.

Embryonic Development: The ball of cells develops into an embryo at the start of the sixth week. The embryonic stage lasts about 5 weeks. During this time all major internal organs begin developing.
This is also when the neural tube forms – the neural tube will later become the brain, spinal cord, and major nerves. If a female doesn’t have enough folic acid (an important B-vitamin) in her body before pregnancy, these organs may not develop properly. Folic acid plays an important role in the development of these organs, which is why some pregnant people take extra folic acid before and/or during pregnancy. We will talk about this a little later.
By the end of the 2nd month, the heart has formed, webbed fingers and toes develop, and the embryo has the beginnings of a liver, external ears, eyes, eyelids, and upper lip.
During month 3
The embryo becomes a fetus.
Umbilical cord connects the abdomen of the fetus to the placenta. The placenta is attached to the wall of the uterus:
The placenta absorbs nutrients from the female’s bloodstream.
The cord carries nutrients and oxygen to and takes wastes away from the fetus.
Fetus is about 2–3 inches long.
Hormones begin to make external sex organs appear — female or male.
Fetus begins moving.

NOTE: A medication abortion (taking a set of pills to end a pregnancy) is available at most health centers for up through 9 weeks (just over 2 months, during the first trimester).
Lesson 14: Menstruation, Conception, Pregnancy, & Birth

**Slide 21:**

**First Trimester (months 1-3)**
- Embryos from 5-11 weeks
- Major organs
- Neural tube
- Beginnings of eyes, ears, lips
- Fetus at 12 weeks
- Umbilical cord connects fetus to placenta
- By end of 3rd month
  - 2.3 inches long
  - Beginnings of sex organs
  - Begins to move

**Slide 22:**

**Second Trimester (months 4-6)**
- Organs continue to mature
- By end of 2nd Trimester:
  - 14 inches long
  - Cannot survive outside the uterus without extraordinary medical attention, including periodic help with breathing.

SECOND TRIMESTER (months 4-6):
Organs continue to mature.
By the end of the sixth month, fetus is ¾ of its birth length -- about 14 inches long.
By end of 2nd trimester, fetus cannot survive outside the uterus without extraordinary medical attention, including periodic help with breathing.

NOTE: Abortion can be legally accessed in CA up until 24 weeks (about 6 months, at the end of the second trimester). After 24 weeks, abortion is legal only if performed in order to save the life or health of the mother. This will be discussed more during the section on pregnancy options.
About 1 in 3 females will have an abortion at some point in their lives.

**Slide 23:**

**Third Trimester (months 7-9)**
- Brain & lungs mature
- Eyes open and close
- Sucks on thumb
- Responds to light
- Due date: 40 weeks from the first day of the last menstrual period
- Average birth weight: 7.6 pounds
- Average birth length: 20 inches

THIRD TRIMESTER (months 7-9):
Brain and lungs continue to mature.
Fetus begins to open and close its eyes, suck on its thumb and respond to light.

Due date: 40 weeks from the first day of the last menstrual period.

When born, the baby's weight will average 7.6 pounds. Under 5.5 pounds is described as “low birth weight” and being over 8.8 pounds as a “high birth weight.” Being born very small or very large can mean more complications and health risks.
Average birth length is about 20 inches long from top of the head to bottom of the heel.
Slide 24:

Explain to students that this is the process of birthing a baby. This includes labor and delivery.

There are 4 stages of vaginal birth:

Early Labor – This is when the cervix begins dilating. Contraction, or waves of sensation similar to menstrual cramps, will begin occurring at first spread apart and then closer together and more regularly. The contractions are helping to open the cervix. This stage ends when the cervix is 3 cm in dilation (about the size of a golf or ping-pong ball). This stage can last anywhere from 6-12 hours.

Stage 1: Active Labor – This is when the cervix dilates from 3cm to 10 cm (about the size of a grapefruit). Contractions will become stronger and closer together until they are happening almost one after another. The head is usually positioned on the cervix, the face positioned towards the spine. If the head is not positioned on the cervix, this is called a “breech” position. It can be safe to deliver the baby in this position, but some health care providers will recommend a Cesarean birth instead. This stage can last up to 8 hours or longer.

Stage 2: Delivery – This is when the baby is delivered. The baby has to do a series of maneuvers to twist and move through the pelvis. When the baby is born it will take its first breath of air using its lungs. Usually, shortly after birth the umbilical cord is cut. This stage can take a few minutes or a few hours.

Stage 3: Delivering the Placenta – This is when the placenta is delivered. The placenta is an organ that connects the developing fetus to the uterine wall to allow nutrients, waste, and oxygen to be exchanged between the mother and fetus. After the baby is born the uterus will continue to contract and expel the placenta. This is usually completed within 10-12 minutes after the baby has been delivered.

For people who have a Cesarean birth, sometimes it is a planned procedure and the female does not experience these stages of childbirth. Other times it is not planned and someone may go through stage 1 and 2 before deciding to have a Cesarean birth.
There are many birthing options for someone to consider when giving birth.
Type of birth: vaginal (baby is birthed through vaginal canal) or Cesarean birth (the baby is born through a surgical procedure in which a surgeon opens the uterus). The rates of Cesarean births are increasing in the US. In 2011, 32% of births were Cesarean births.
Setting: hospital, birthing center, home birth, water birth.
Support: physician/doctor, midwife, doulas, friends, family, partner(s).
Comfort measures: medications, massage, water birth, aromatherapy, acupressure, positions (such as standing, laying down, kneeling, leaning or swatting), etc.

Explain to students that every person experiences childbirth differently. What students may have seen in movies or on TV does not accurately represent how all people experience childbirth.

Review with students how life choices can impact our health.

IMPACTS ON HEALTH

Begin the discussion by brainstorming the following:
What actions do people take to be healthy? Write down answers – might include eat healthy foods, exercise, etc.
What are some of the things that can have a negative impact on health? Write down answers – might include taking drugs, eating junk food, etc.
Which of these can help or interfere with a healthy pregnancy? Circle responses– explain that this is one of the reasons that it's important for people who want to continue a pregnancy to get a special kind of health care called prenatal care.
Lesson 14: Menstruation, Conception, Pregnancy, & Birth

Slide 28:

Prenatal Care:
Prenatal care helps to protect the biological mom's health. Because of more people accessing prenatal healthcare, pregnancy and childbirth are safer than ever before. (100 years ago, almost 1 in 100 births resulted in the mother's death. Today, less than 1 in 8000 births result in the biological mother's death. Still, this rate is much higher than the death rate from all forms of birth control combined.)

Prenatal care also helps to protect the fetus’ health. (About 150 years ago (1850), the infant death rate was 216.8 per 1,000 population for white babies and 340 per 1,000 population for black babies. In 2000, it was 5.7 per 1,000 population for white babies and 14.1 per 1,000 populations for black babies.)

Health professionals recommend that someone who is pregnant gets prenatal care as early as possible, since the first trimester of pregnancy is so important to the fetus' development.

Prenatal care involves regular check-ups with a health care provider, usually someone who specializes in women's health and/or pregnancy (i.e. gynecologist, obstetrician, or midwife). Usually, check-ups become more frequent later in pregnancy.

The health care provider partners with the biological mother to help her and the fetus by:

- Providing medical services.
- Making recommendations about how to maintain a healthy lifestyle while pregnant – taking vitamins, having a healthy diet, and exercising.
- Checking for and treating potential health problems early.
- Providing information and answering questions about pregnancy and birth.

Under current health care law, all insurance plans must provide free or low-cost prenatal care; in California, any person, regardless of immigration and/or documentation status or age, who is pregnant, has the right to free or low-cost prenatal care.

Slide 29:

Going back to our previous discussion about steps people take to improve their health, why do you think it is important for all people, regardless of sex or gender, to be healthy before pregnancy occurs?

The biological father's health can affect the health of his sperm. The biological mother’s health can affect not only the effect the health of her eggs but also the health of a growing embryo even before she knows that she is pregnant.

Being healthy before pregnancy is called preconception health (pre=before, conception=pregnancy).
Lesson 14: Menstruation, Conception, Pregnancy, & Birth

Pass out the Preconception Health Handout.

Point out that most of the recommended actions are the same for all people. Review the basics:

Maintain a healthy lifestyle:
Take a multi-vitamin with 400-800 micrograms of a B-vitamin called folic acid every day. Folic acid helps prevent serious birth defects of the brain and spine (neural tube defects), as well as other birth defects like cleft palate. New research shows that it may also help males have healthier sperm.

Eat balanced and nutritious meals, and exercise.
Avoid drugs, alcohol, and smoking. These can affect someone's overall health, including sperm quality and the health of a pregnancy.

Limiting caffeine before and during pregnancy can also support someone's ability to become pregnant and maintain a healthy pregnancy.

If possible, see a health care provider before starting a pregnancy. All of the following can affect the health of a fetus and/or biological mother. Some can also affect sperm health or cause early (pre-term) birth:

Test for sexually transmitted infections (STIs like Chlamydia, Gonorrhea and HIV). Anyone 12 or older can access these services confidentially. It's healthier to treat or cure STIs before pregnancy. STIs can be passed between sexual partners. If left untreated, STIs can be harmful to someone's health as well as the health of a growing pregnancy. Students will learn more about STIs in a later lesson.

Make sure vaccinations are up-to-date. Certain diseases, like flu, chickenpox and measles can affect the health of a fetus.
Make sure that medical conditions are under control, including asthma, diabetes, depression, high blood pressure, thyroid disease, and epilepsy.
Check to see if any medicines, over-the-counter drugs, or herbal and dietary supplements could be harmful to a growing pregnancy.
People can choose to get tested for genetic conditions that could be inherited.
### Slide 31:

**Ask students to brainstorm answers to this question. Click to reveal the answers.**

**What are the benefits of preconception health for someone who is not actively planning a pregnancy?**

- Better health right now
- Forming healthy habits
- Prepared for pregnancy (50% of pregnancies unplanned)

### Slide 32:

**Why would it be healthy to avoid toxic substances and dangerous chemicals in the home or work environment?**

- A growing fetus is even more likely to be hurt by toxins than a teenager or fully grown adult.

### Slide 33:

**Why would it be healthy to create and establish healthy, supportive relationships?**

- Stress can have a negative effect on sperm production, a female’s ability to become pregnant, and a growing fetus. On the other hand, a positive relationship can support the health of a pregnant female and a fetus.

---

After completing all of the slides, explain that peer educators from the Teenage Pregnancy and Parenting Program will be coming to class and they will share their experiences with being a teen parent. They will share more about preconception health, pregnancy, prenatal care, childbirth, and parenting.